massDOT
Massachusetts Department of Transportation
Highway Division

Welcome!

Route 28 Bass River Bridge Replacement Project
Yarmouth and Dennis | Project File No. 606714

Public Information Meeting

Dennis Police Department – 90 Bob Crowell Rd.
May 24, 2018 | 6:30 PM

Agenda

- Welcome and Introductions
- Project Overview
- Existing Conditions
- Conceptual Design
- Construction Stages
- Frequency Asked Questions
- Stay Informed

Project Team

MassDOT's Highway Division
Project Proponent

HDR
Bridge Engineer and Lead Consultant for team including Howard Stein Hudson

Town of Dennis, Town of Yarmouth
Coordination

Project Area

Project Limits

- Pleasant Street, Yarmouth
- Driveway at Bass River Park, Dennis

Adjacent Yarmouth Project

- Coordinating with adjacent project
- Main Street (Route 28) at North Main St. and Old Main St.

History of the Bass River Bridge

- The Bass River Bridge was built in 1935 and is owned and maintained by MassDOT
- It is the fourth in a series of bridges dating back to 1832

Bass River Bridge - 1891

Bass River Bridge - 1907

Project Goals

- Replace the structurally deficient bridge
- Provide a multi-modal bridge that is safe and comfortable for all users
- Reduce the impacts of construction to the traveling public, river users and abutters to the extent possible
- Maintain traffic, water navigation and emergency services access during construction
- The project is currently budgeted at $17.25 million

Public Outreach to Date

- 3 Targeted briefings with project stakeholders
  - December 19, 2017 - Friends of the Bass River
  - March 27, 2018 - Police, Fire, EMS from Yarmouth, Dennis, Harwich and Chatham
  - May 11, 2018 - Marina managers and Town Harbormasters
- Yarmouth Chamber "After Hours" Event - May 17, 2018
- Meeting notice posted at Town Halls and Public Libraries – May 17, 2018
- Meeting notices advertised in the Cape Cod Times and Yarmouth Register – May 3 & 10, 2018
- Project website and fact sheet – May 8, 2018

Existing Conditions

Existing Cross Section

Existing Bridge Cross Section

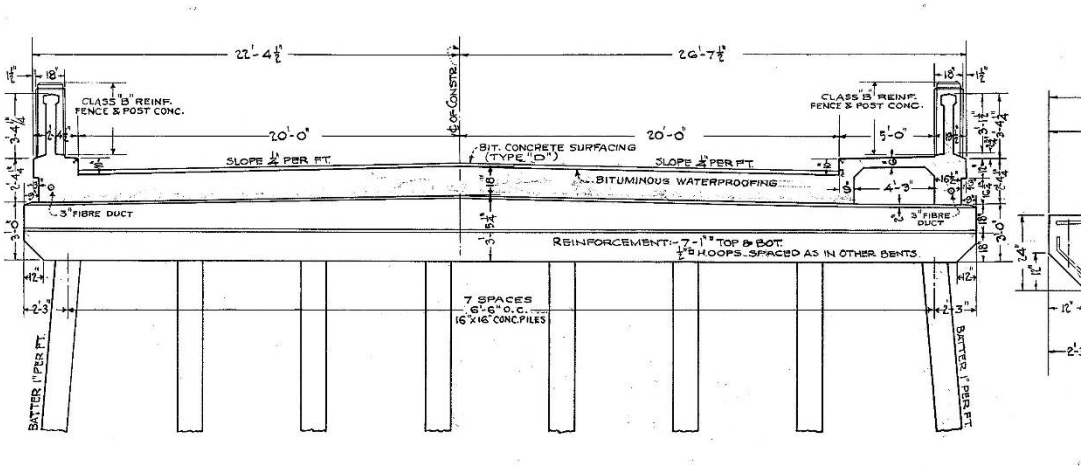
Bridge Deck Width: 49’-0’’

Roadway Width: 40’-0”

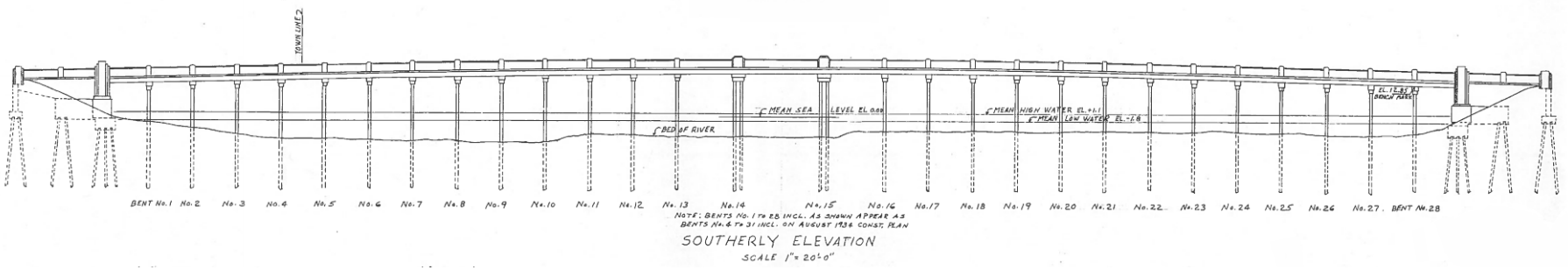
South Sidewalk: 5’-0”

North Sidewalk: None

Shoulder: 8’-0”



Existing Bridge - Elevation



SOUTHERLY ELEVATION
SCALE 1"= 20'-0"

Navigational Channel:
- 30’-0” Clear Span
- 15’-0” Vertical Clearance
- (from Mean High Water Elev.)

Approach Spans:
- 30 Spans at 18’-0”
- 2 Spans at 25’-0”
- 1 Nav. Channel at 35’-0”

Total Bridge Length = 625’-0”

Concept Cross Section

Concept Bridge Cross Section

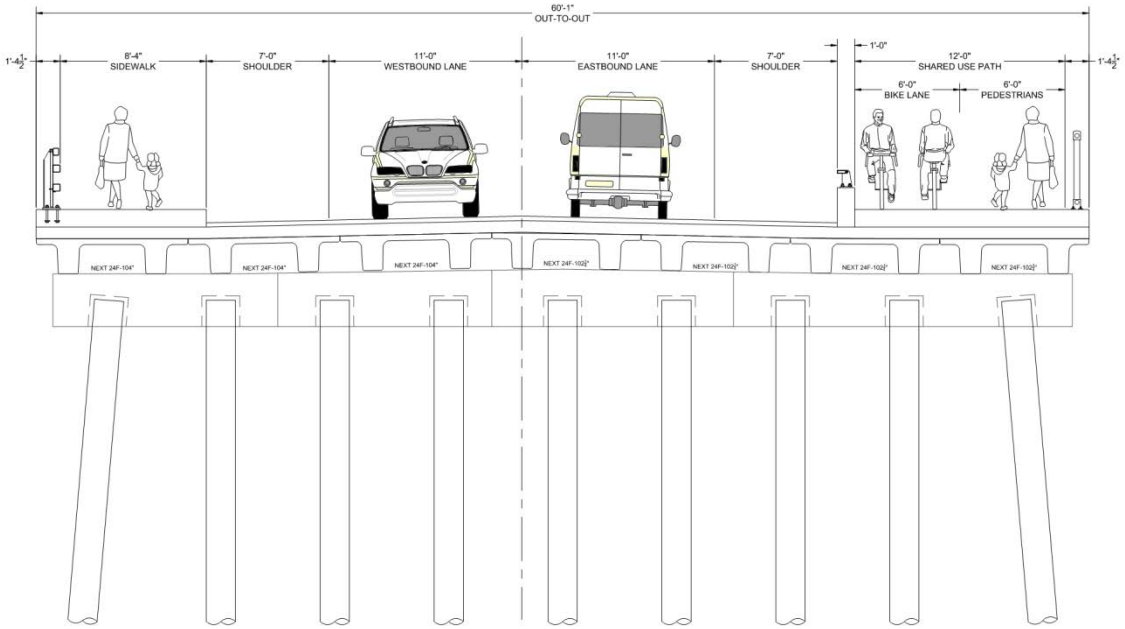
Bridge Deck Width: 60’-1’’

Roadway Width: 36’-0”

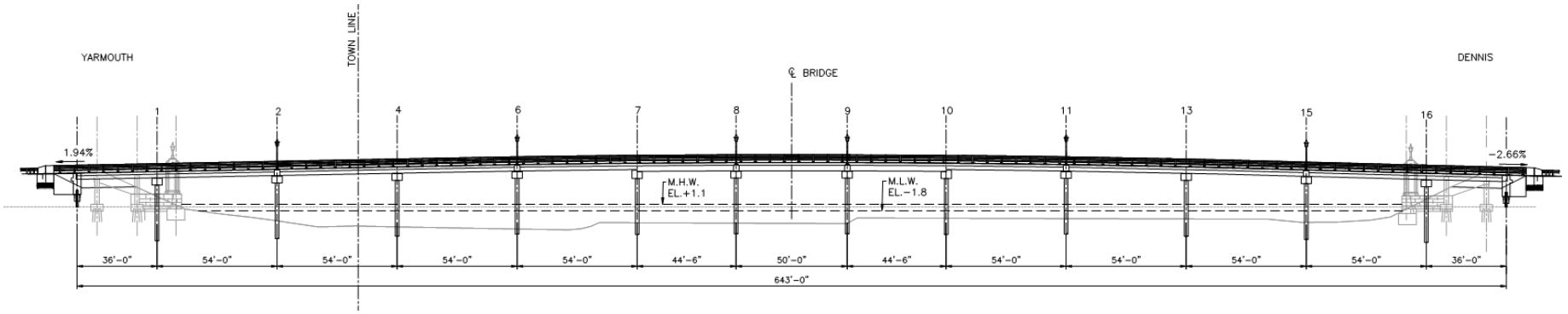
South Sidewalk: 12’-0”
Shared Use Path

North Sidewalk: 8’-4’’

Shoulder: 7’-0”



Concept Elevation



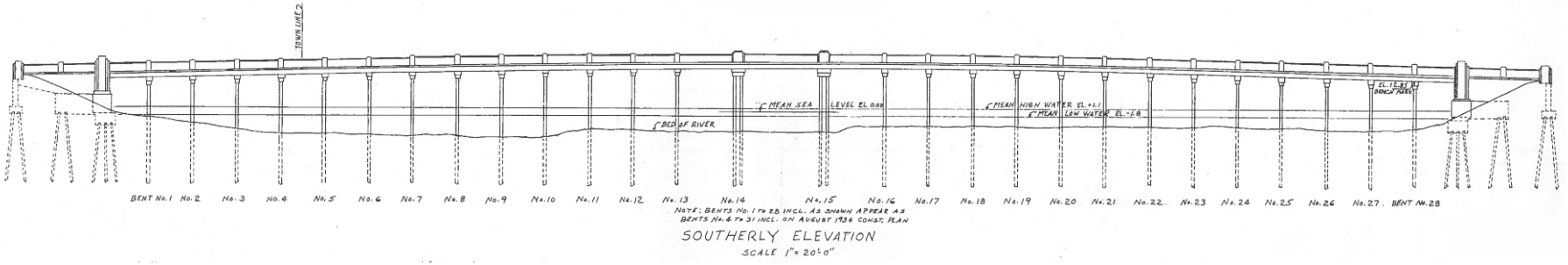
Concept Navigational Channel:
- 45’-0” Clear Span
- 15’-0” Vertical Clearance

Concept Approach Spans:
- 8 Spans at 54’-0”
- 2 Spans at 36’-0”
- 2 Spans at 44’-6”
- 1 Nav. Channel at 50’-0”

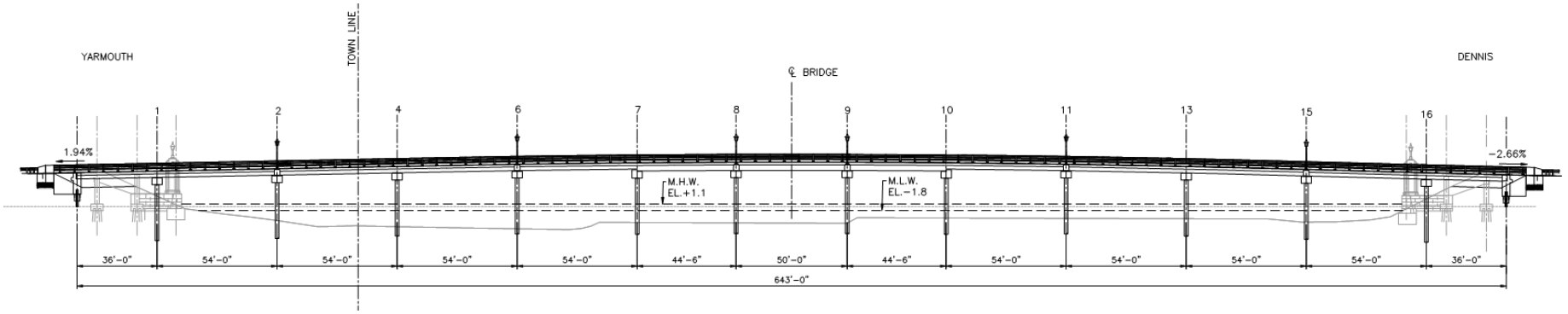
Total Bridge Length = 643’-0”

Existing and Concept Comparison

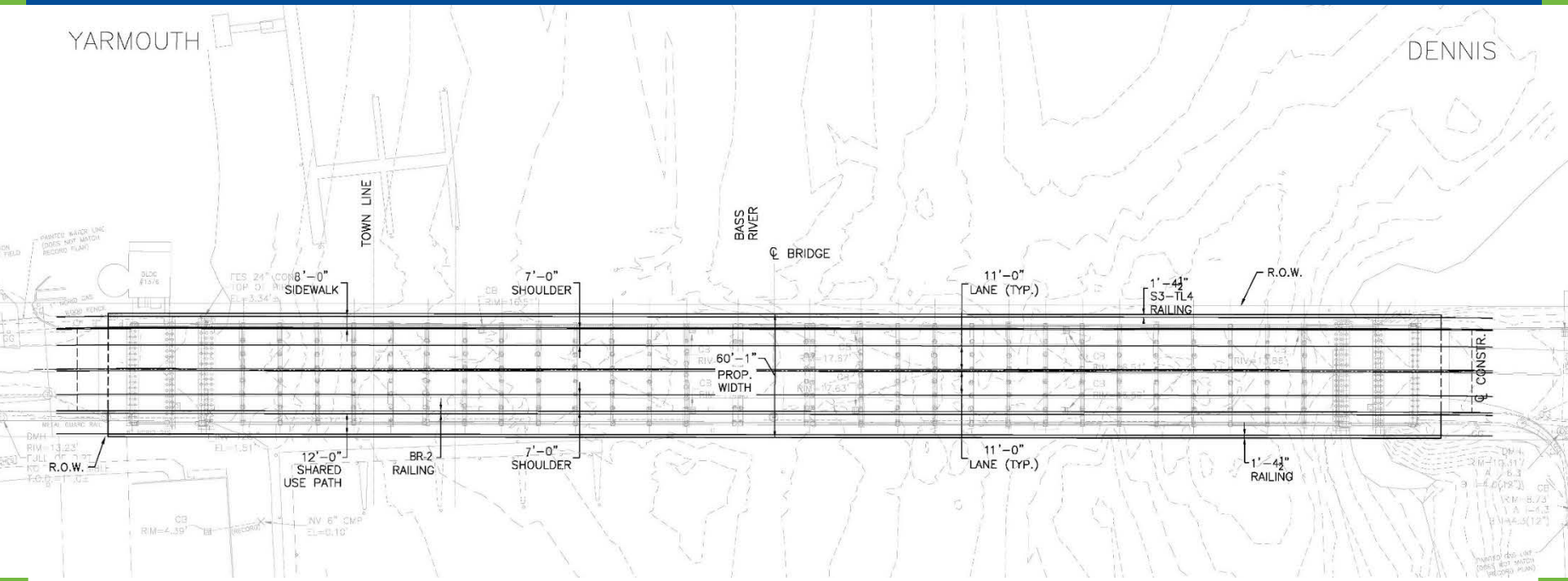
Existing Bridge



Concept Bridge



Concept Bridge Width



MassDOT Right of Way is 65’-0” wide

Concept Bridge is 60’-1” wide

Concept Bridge widened to both North and South

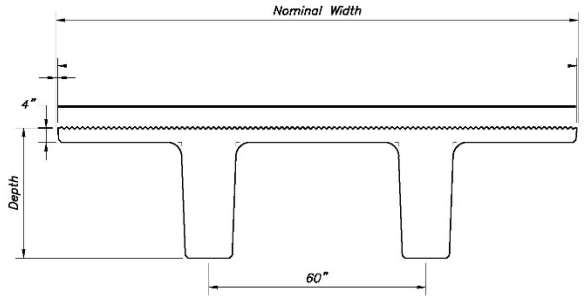
Span Arrangement & Bridge Materials

Span Arrangement

- Existing Piers are spaced at 18’-0” apart
- Conceptual Plan to open up the Approach Span Piers to be spaced at 54’-0”

Superstructure Materials

- Structure Type best addresses the project constraints and parameters and best fits the site conditions.
- Use of Accelerated Bridge Construction (ABC) innovative rapid construction techniques.
- Bass River Bridge lends itself to a bridge to use ABC construction techniques.
- Northeast Extreme Tee (NEXT) beams with a composite concrete deck.



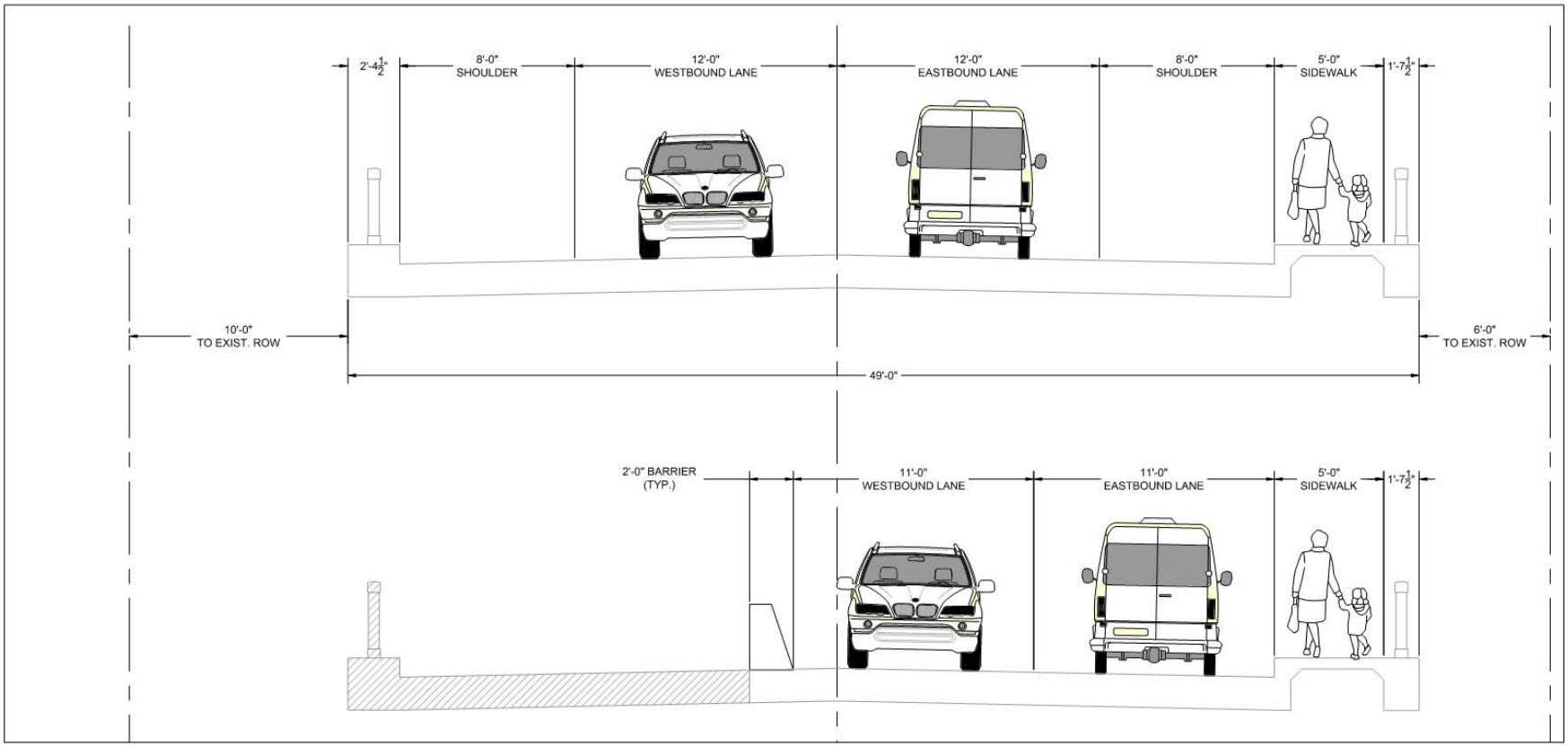
STANDARD NEXT F BEAM
NOT TO SCALE

Construction Overview

- Demolition will involve barges in the river
- Two travel lanes will be maintained throughout construction
- A temporary pedestrian bridge may be built to maintain pedestrian access during construction
- Winter construction to reduce impacts during the high season
- Anticipated to begin in 2020

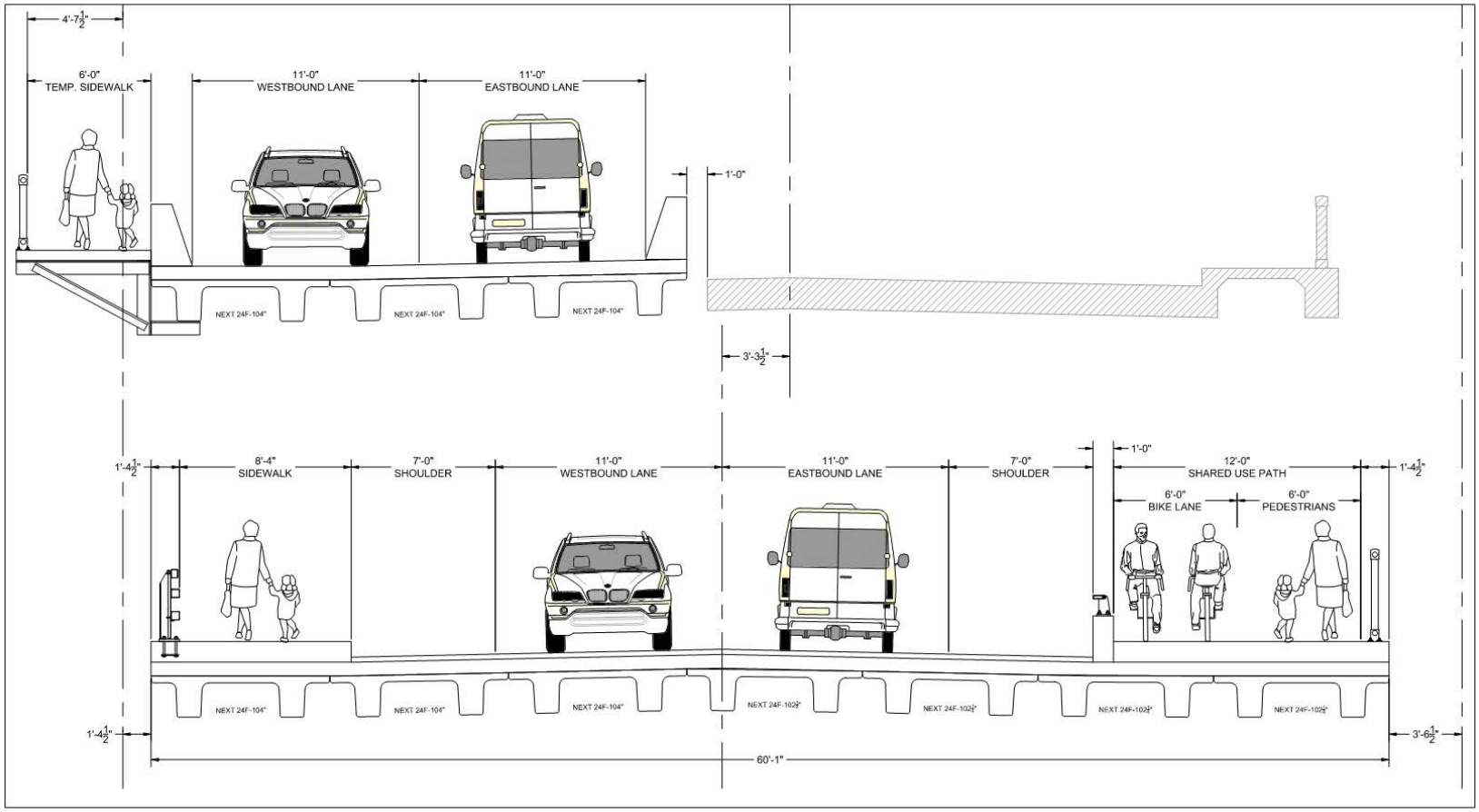
Construction Staging

Existing Condition and Construction Stage 1



Construction Staging

Construction Stage 2 and Final Condition



Frequently Asked Questions

Question	Answer
Can the bridge be raised to allow larger boats to pass underneath?	Raising the bridge more than a few inches would have significant Right of Way impacts that would increase the project cost and duration of construction. The navigational channel can be widened to make passage underneath the bridge easier.
Can the health of the river be improved?	The new bridge will have fewer piers than the current bridge, which will improve water flow. Parts of the river may also be dreged to allow construction barges to access the bridge, further improving water flow.
How will Packet Landing be impacted during construction?	Packet Landing will remain open during construction, but the slips closest to the bridge will need to be relocated. They will be returned to their current location when the project is complete.

Frequently Asked Questions

Question	Answer
Will I still be able to pilot my boat under the bridge during construction?	Yes, during construction a navigational channel will be maintained to allow boats to travel up and down the river. It is currently anticipated that the Project Contract will be written to limit impacts to boaters during the boating season.
Will I still be able to drive, walk and bike over the bridge during construction?	Yes, access for people driving, walking and biking will be maintained at all times during construction. A temporary pedestrian bridge is currently anticipated to be constructed in order to maintain pedestrian access and ease passage of emergency vehicles across the bridge.
How will emergency vehicles get across the bridge during construction if traffic is backed up?	Police details will be located on site to help move traffic and allow emergency vehicles to pass through the construction area. Construction will also be staged to minimize traffic impacts to the extent practicable.

Stay Informed

http://www.massdot.state.ma.us/highway/HighlightedProjects/BassRiverBridgeReplacementProject.aspx

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Thank You

Q&A

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